



PENMANS have put a world of character into knitted coats of all sorts. Sport coats with their charming—if perf.aps bizarre—color contrasts open up new avenues of expression for artistry in dress. When these clever creations bear the Penman label all doubt as to their holding shape and fit is at once dispelled.

Penmans Sweater Coats

"The Standard of Excellence"

HINTS ON COOLING MILK

Three Essentials in Cooling Explained.

Make That Spring on Your Farm a Profit Question—It Should Be Enlarged, Cleaned Out Well and Cribbed in an Efficient Way.

(Contributed by Ontario Department of Agriculture, Toronto.)

BACTERIA in larger or smaller numbers are always present in freshly drawn milk. At temperatures between 50 deg. F. and 98 deg. F. (blood heat) they grow and multiply rapidly, causing the milk to become quickly spoiled. As the temperature falls below 50 deg. F., the bacteria become less active; the changes caused by them are less marked, so the milk keeps sweet and in good condition for a longer time.

Growth of bacteria in milk in 24 hours (136,000 per c.c. when freshly drawn):

Table with 2 columns: Temp. held, Bacteria Per C.C. (20 drops) after 24 hours. Rows: 40 deg. F. (280,000), 50 deg. F. (1,170,000), 60 deg. F. (24,600,000)

The above table shows how low temperatures check bacterial multiplication in milk. This is the scientific fact upon which the practice of milk cooling is founded.

In practice a dairyman should bear in mind three things in connection with the cooling of milk. First—cool milk with as little delay as possible after it comes from the cow. Second—cool milk to as low a temperature as possible, say somewhere between 40 deg. F. and 50 deg. F. Third—cool milk with as little contamination as possible from outside sources, such as dust, dirty utensils, water splashing, etc. If these three points were regularly attended to by all dairies a marked improvement in the general quality of our milk supplies would be noticeable right away.

The quickest way to cool milk is to run it over some form of tubular or surface cooler, pall by pall, immediately it is drawn from the cow. In this way milk may be rapidly cooled to within two or three degrees of the temperature of the water used. The objections to this method are the extra work involved in washing the cooler twice a day, the difficulty of keeping it properly clean, and the danger of contaminating the milk with dust, barn odours, etc., unless the cooler is used in a clean and separate milk room.

The other alternative is to place the cans of milk in a tank of running cold water at the earliest opportunity, or in an insulated tank of water into which some chopped-up ice is thrown. If the milk is stirred once every ten minutes during the first hour, cooling will take place more rapidly than where milk is left unattended. If cold running water is not available all summer, enough ice should be put up during the winter to ensure the milk being brought to a sufficiently low temperature during the warmer portions of the year.

The importance of prompt and thorough cooling of milk is still insufficiently appreciated by many milk producers. There is no cheaper and simpler method by which milk quality may be improved.—T. H. Lund, B.S.A., O. A. College, Guelph.

Making the Farm Spring More Serviceable.

Fortunately a great many farmers of Canada can boast of a good spring of water on their farms. In some cases it is the only reliable and perennial source of water, and when this is the case it usually receives proper care. Probably, however, in general, the spring is a secondary consideration as a water supply, particularly domestic, and consequently is let "run wild" more or less, and is not, therefore, rendering the service it might if it were properly equipped. The object of this short article is to make a few suggestions for the improvement of springs in general.

In the first place the spring should be enlarged, deepened and cleaned out well and then cribbed up in some efficient way. Probably the best method is to get a large concrete or sewer pipe tile or two, about 2 1/2 feet in diameter, and put them down in the spring, cementing the joints well. Put an overflow pipe through the wall of the upper large concrete to the high water mark of the spring, and connect the overflow pipe to a tile drain that leads down to a good outlet some distance away. If it is not connected to a drain the open end should be screened. If the spring be in the pasture it should be fenced in and the overflow pipe referred to extended horizontally to a trough outside the fence. The top should be provided with a tight cover made of concrete or heavy plank.

The spring becomes particularly serviceable if it happens to be located on an elevation considerably greater than the house and barns, for then the water can be piped down under the first line to storage tanks in the building. From the tanks the water flows by gravity to the points of service. Or if the supply is great enough and a fall of a few feet can be secured within a short distance, say 30 or 40 feet of the spring, a hydraulic ram may be installed for pumping the water of a spring to the house and barns. Usually it is pumped into a storage tank in the attic of the house or loft of barn, and from these gravitates to the various plumbing fixtures in the house and the troughs and drinking basins in the stables. If you are particularly interested in this subject of the farm spring and how to make it more serviceable write the Department of Agriculture, Toronto, for a copy of Bulletin 267, which tells you all about it. It costs you nothing for the information except a postal card and a two-cent postage stamp.—R. R. Graham, B.S.A., O. A. College, Guelph.

Pains, after all, are but an elevation on which the victim is placed in order to give the public a better chance to throw mud at him.

Real gratitude is never ashamed of humble benefactors.

OLD TRADER PASSES.

Alexander Mackenzie Formed Link to the Past.

The name of Alexander Mackenzie leads all the rest in the history of Canada's northland. The great explorer and fur trader, who in the closing years of the eighteenth century journeyed first to the Arctic and then to the Pacific, and who is constantly recalled to us by the Mackenzie river, received world-wide recognition for his achievements.

Napoleon Bonaparte was among those most profoundly impressed by the importance of his work of exploration. But there has been another Alexander Mackenzie in recent years, whose name and fame counted for much in the northland itself, though he was practically unknown to the outside world. He died on June 15 last, at Peace River, Alberta, in his 78th year. He was a native of the Province of Quebec, and after being educated in Scotland, entered the service of the Hudson Bay Company in 1846.

For forty years he was one of its officers, serving it with much distinction at many different posts all along the Mackenzie and its tributaries. Fifteen years ago he was pensioned and has since made his home six miles below the town of Peace River, near the point where the Peace is joined by the Smoky. The ruins of one of the oldest posts of the company are adjacent to his farm.

Since settlers began to arrive in large numbers in the Peace River country and the railway was built the romantic aspect of the fur trade has largely disappeared. Mr. Mackenzie was to a unique degree a link with the old days. In winter time he always wore what was at the time he entered the employ of the company the distinctive costume of the trader.

A photograph, which was found on his body at his death, the only one copy, it is believed, being in existence, shows him in that costume. From it a person can easily appreciate how picturesque a figure he was and what a source of interest he was to those whose good fortune it was to meet him.

Those who have visited the town of Peace River must have been impressed by the great height of the river banks there. At a point 740 feet above the water level there is a grave, that of "Twelve-Foot" Davis, one of the earliest of the country's earliest free-traders, in a fur-trading, not in a fiscal sense. Davis and Mackenzie were strong rivals for many years.

Davis was first buried at Grosard, but his remains were afterwards taken by James K. Cornwall—a much younger free-trader, who is now the commanding officer of a railway battalion in France, where he has won the D.S.O. and the Croix de Guerre—back to the highest point of hills above Peace River. Over them lies a monument.

The grave at that great height recalls, that on the Matopopo Hills, Cecil Rhodes rests, Cornwall, being an intense admirer of the hero of Rhodes, probably had the plan of honoring the memory of his friend Davis suggested to him by the provision which the South African Empire builder made for his final resting place.

The writer visited Peace River in the autumn of 1916, and met Mr. Mackenzie. The conversation came around to the grave of "Twelve-Foot" Davis, and his old-time rival then stated that he knew of a higher spot on the other side of the river, where he intended to be buried. But his grave is in Mount Pleasant Cemetery, just outside the town and, so far as his executors have learned up to the present, he made no definite request or provision to be buried on the heights.

When he turned from trading to farming, he and his sons made a very considerable success of the latter. His enterprise is shown by the fact that he brought the first threshing machine into the district and the machinery for the first grist mill.

It is a familiar charge against old Hudson Bay men that they were never prepared to concede the possibilities of agriculture in the country over which they had traded. But this could never be preferred against Mr. Mackenzie. He had the most abundant faith that the northland would sustain a very large population.

He had kept extensive notes of his experiences during fifty-five years along the northern rivers, and these should prove of the utmost historical value.

The Annexation Bogey.

The United States and Canada have lived at peace for over 100 years, and their relations to-day are more friendly than ever. The national creed of the Americans is against the acquisition of territory by conquest, Canada is safe from armed aggression from that quarter. Annexation could be effected only with the consent of a majority of the people on both sides of the border, and this puts it beyond the range of possibility. Even the American flag in Alaska is no menace. Canada can set its hand to its own household affairs undisturbed. The annexation bogey is simply the creature of a disordered brain. This country is comparatively secure, with at the north a pole which even American enterprise has not been able to locate to popular satisfaction, a vast ocean on either side and a friendly nation of one hundred million people to the south.—Peterboro' Review.

Too Many Non-Fighters.

Of twenty-seven officers in the Pay Office of Toronto Military District fifteen have been overseas, and of 104 non-commissioned officers and men only 21 have served outside of Canada. There is need for the planting of a good many more returned fighting men in that warm nest.

"My back is almost broken with this weary load," sings the poetess. She ought to make her husband carry up the coal.

About the greatest drawback to a man's happiness is himself.

WHY EXPERIMENT?

Food scientists claim that the leavener is largely responsible for the flavor, texture and wholesomeness of your home baking. That on no other one ingredient does so much depend. It is important, therefore, to use a baking powder that you know possesses the necessary leavening qualities.

MAGIC BAKING POWDER

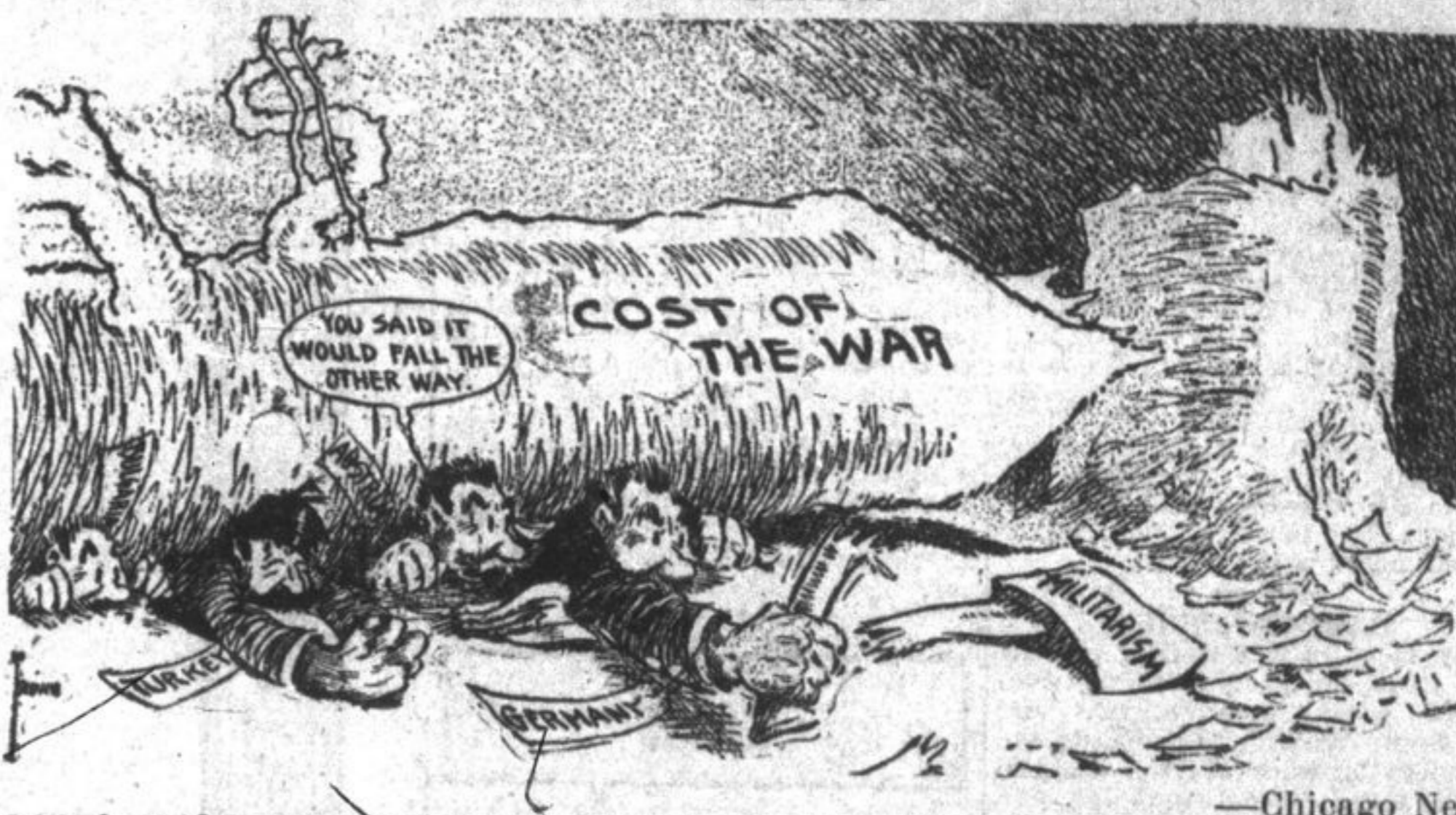
Contains No Alum

and is the only strictly high class baking powder in Canada selling at a moderate price. Its reputation is built on purity and highest quality.

The only well known medium priced baking powder made in Canada that does not contain alum and that has all its ingredients plainly stated on the label.

Made in Canada

ALL UNDER IT.



—Chicago News.

CONTRACT ALMOST FINISHED.

Two on Way From Alexandria Bay to New York.

Alexandria Bay, N.Y., May 19.—With two barges already on their way to New York and two others about ready to start, Hutchinson Bros. have nearly completed their contract with the navy department for four barges. The barges will be used as coal lighters.

Two of the barges left last week for New York, via the barge canal. One was loaded with paving blocks

for New York and the other was light. They were towed by the Hinckley and the Isabella, owned by Captain Hinckley of Oswego.

Right Hon. James Henry Thomas, who is regarded as the leading representative of labor in the British Parliament, will shortly leave England for a tour of the Eastern United States, and will extend his trip to Canada, where he will address three or four gatherings, probably of Canadian clubs.

Winnipeg officials and business men, in conference with persons friendly to the unions, have drafted a plan intended to bring the disagreeing factions together.

The Detroit American League club have bought Pitcher "Dutch" Leonard from Boston, the price being ten thousand dollars.

Without charity for the defects of humanity there would be no self-esteem.

The Minister of Militia gave notice of intention to revise the Penions Act.



The Rest Cure

"HOW are you this morning?" "I am not very well, and I do not see why I ever came to this place."

"Why, this is a fine place to take the rest cure, and that is what your doctor has prescribed."

"Well, it is no rest for me, for I have too much time to think and to worry. I could not get any sleep last night, and I know I shall never get better here."

"Most people like it here."

"Perhaps they do if there is nothing the matter with them. But if their nerves were in such a condition as mine they would be about as miserable as I am. I wish I had stayed home and used Dr. Chase's Nerve Food, that is what some of my friends advised."

"Why not use it here. I know lots of people who have been cured by using it, and the rest will surely help some."

"That sounds to me like a good idea. Now you just get me half a dozen boxes at the drug store and we will try it out. If it will only steady my nerves so I can rest and sleep I am sure that I shall soon be better."

"I know that it will help you, for I have watched so many cases in which it was used and never saw a failure yet."

"And I was told about it often enough before I left home, but thought I had to have more expensive treatment. They will have the joke on me if the Nerve Food cures me, but we will give it a chance, anyway."

Dr. Chase's Nerve Food, 50 cents a box, 6 for \$2.75, all dealers, or Edmansons, Bates & Co., Ltd., Toronto. On every box of the genuine you will find the portrait and signature of A. W. Chase, M.D., the famous Receipt Book author.



LEET FOOT FOR ALL OUT-DOORS

For summer sports, of course—and for every-day wear as well.

Leet Foots are the easiest, most comfortable shoes you can wear, and the most economical.

There are Leet Foot styles for every member of the family, and for every sport and recreation.

Look for the name stamped on the sole.

The Best Shoe Stores Sell

